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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,095	02/14/2002	Nikhil Jain	020128	1421

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QUALCOMM Incorporated  
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EXAMINER

HOANG, THAI D

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 02/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/077,095

Applicant(s)

JAIN ET AL.

Examiner

Thai D Hoang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Application filed on 02/14/2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-3, 6-8, 11-14, 17-19 and 21-25 are rejected under 35 U.S.C. 102(a) as being unpatentable over Wiedeman et al, US patent no. 6,233,463 B1, hereafter referred to as Wiedeman.

Regarding claims 1 and 12 Wiedeman discloses a system configured for supporting wireless communication between a code division multiple access (CDMA) and both a GSM core infrastructure and an IS-41 core infrastructure (figures 6A-8B), comprising:

a first circuit communicating with the CDMA wireless signal, the first circuit communicating with the IS-41 core infrastructure (34, 44) using IS-41 protocol; and

a second circuit communicating with the CDMA wireless signal, the second circuit communicating with the GSM core infrastructure (36, 48) using GSM protocol (col. 12, line 45- col. 13, line 60)

Regarding claims 2, 7 and 13, the system disclosed by Wiedeman inherently selects the first or the second circuit base on at least one message (user ID and/or location, and/or protocol...) from a mobile station, because the system cannot service

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for mobile station without the message from the mobile station to detect roaming or protocol type of the mobile station (col. 5, lines 1-59.)

Regarding claims 3, 8 and 14, Wiedeman does not explicitly disclose that the message is a location message. However, Wiedeman teaches that the system can detect a roaming user (col. 5, lines 1-59). It indicates that the system receives location message from the roaming user.

Regarding claim 6, Wiedeman discloses that the system configured for supporting wireless communication between a code division multiple access (CDMA) and both a GSM core infrastructure and an IS-41 core infrastructure, comprising:

a state machine selectively configurable to communicate with the IS-41 core infrastructure using IS-41 protocol (34, 44) or with the GSM core infrastructure using GSM protocol (36, 48), based on at least one identifier received from at least one MS.

Regarding claim 11, Wiedeman disclose that the system comprises (fig. 6A-8B)

CDMA Radio interface (element 40; col. 12, lines 53-55);

GSM core infrastructure (36, 48);

CDMA core infrastructure (34, 44); and

an MSC interconnecting the CDMA RAN with both infrastructures.

Regarding claims 18 and 23, Wiedeman discloses that the system communicates with a first wireless mobile station (MS) having a subscription in a GSM core infrastructure (36, 48) and with a second wireless MS having a subscription in a CDMA infrastructure (34, 44) without requiring either MS to have more than a single subscription. Wiedeman discloses that the system comprises the step of:

receiving at least one identifier from at least one MS and based on the identifier, determining the core infrastructure in which the MS has a subscription

undertaking authentication with the MS using information from the core infrastructure in which the MS has a subscription (fig. 6A-8B; col. 12, line 45 – col. 14, line 26, col. 17, lines 12-53); and

collecting accounting data using the core infrastructure in which the MS has a subscription (billing system 58).

Regarding claim 19, Wiedeman disclose that the interface 40 of the system receives wireless CDMA signal (col. 12, lines 52-54; col. 14, lines 25-27)

Regarding claim 21, Wiedeman discloses that the system receives an accounting data of an MS from the billing system (58).

Regarding claims 17 and 22, Wiedeman discloses that the method comprises the step of: using GSM protocol when the MS has a subscription in the GSM core infrastructure, and otherwise using IS-41 protocol when the MS has a subscription in the CDMA core infrastructure (fig. 6A-8B; col. 12, line 45 – col. 14, line 26, col. 17, lines 12-53.)

Regarding claim 24, Wiedeman discloses in figures 6A-8B that the system comprises: at east one storage device including an identifier (elements 34a-b, 38, 44, 50, 51, and 58); at least one radio communicating the identifier to a CDMA radio access network (CRFIS 40, RF 52); and one subscription in a GSM core infrastructure (48, 36)

Regarding claim 25, Wiedeman discloses that the system uses radio CDMA signal (col. 12, lines 52-54; col. 14, lines 25-27) and execute authentication with the

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GSM core infrastructure (36, 48) while the MS is located in an area serviced by a CDMA core infrastructure (fig. 1, 6A-8B; col. 12, line 45 – col. 14, line 26, col. 17, lines 12-53.)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5, 9-10, 15-16, 20, 26-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedeman in view of Bright et al, US Patent Application Publication No. 2002/0094811 A1, hereafter referred to as Wiedeman and Bright respectively.

Regarding claims 4, 9 and 15 Wiedeman does not disclose that the location message includes an international mobile subscriber identifier (IMSI). However, Bright discloses a method and system for interworking and interoperability between GSM and another wireless system (figure 3). Bright discloses that the MS (356) performs a GPRS location update using its IMSI (col. 6, paragraph [0051]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt IMSI disclosed by Bright into the Wiedeman's system in order to improve service for customers because the serviced area for the customers is expanded.

Regarding claims 5, 10 and 16, Wiedeman does not disclose that the system uses the IMSI to determine in which core infrastructure the MS has a subscription. However, Bright discloses that the system uses the IMSI to determine in which core infrastructure the MS has a subscription (figure 5; paragraph [0053]). It would have

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been obvious to one of ordinary skill in the art at the time the invention was made to adapt IMSI disclosed by Bright into the Wiedeman's system in order to improve service for customers as mentioned in claim 4.

Regarding claims 20 and 26-27 Wiedeman does not explicitly disclose that the identifier is an IMSI. However, the system disclosed by Bright teaches that the system uses IMSI to update location of a user. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt IMSI disclosed by Bright into the Wiedeman's system in order to improve service for customers as mentioned in claim 4.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to the application:

US patent no. 6,278,697 B1 to Brody et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D Hoang whose telephone number is (703) 305-3232. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

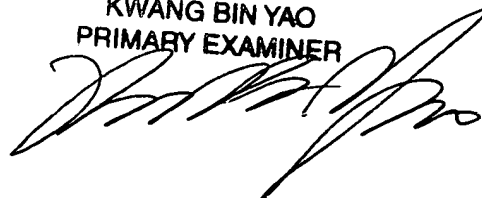
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Thai Hoang  
February 5, 2003

KWANG BIN YAO  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Kwang Bin Yao', is written over the printed name and title.